

POSITION DESCRIPTION COVER SHEET

REASON FOR THIS POSITION

1. NEW ☒ 2. IDENTICAL ADDITION TO THE ESTABLISHED PD NUMBER ☐ NHQSCSURL12 3. REPLACES PD NUMBER

RECOMMENDED

4. TITLE **Soil Scientist** 5. PAY PLAN **GS** 6. SERIES **0470** 7. GRADE **12**
8. WORKING TITLE (Optional) **MLRA Soil Survey Leader** 9. INCUMBENT (Optional)

OFFICIAL

10. TITLE **Soil Scientist**
11. PP **GS** 12. SERIES **0470** 13. FUNC **12** 14. GRADE **12** 15. DATE Month Day Year ☐ Yes ☐ No 16. I/A ☐ Yes ☐ No 17. CLASSIFIER

8. ORGANIZATIONAL STRUCTURE (Agency/Bureau)

1st	Natural Resources Conservation Service	5th	
2nd		6th	
3rd		7th	
4th		8th	

SUPERVISOR'S CERTIFICATION

I certify that this is an accurate statement of the major duties and responsibilities of the position and its organizational relationships and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds and that false or misleading statements may constitute violations of such statute or their implementing regulations.

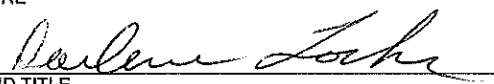
19. SUPERVISOR'S SIGNATURE 20. DATE 22. SECOND LEVEL SUPERVISOR'S SIGNATURE 23. DATE
21. SUPERVISOR'S NAME AND TITLE 24. SECOND LEVEL SUPERVISOR'S NAME AND TITLE

FACTOR EVALUATION SYSTEM

FACTOR	25. FLD/BMK	26. POINTS	FACTOR	25. FLD/BMK	26. POINTS
1. Knowledge Required	FL 1-7	1250	6. Personal Contacts	FL 6-3	
2. Supervisory Controls	FL 2-4	450	7. Purpose of Contacts	FL 7- C	180
3. Guidelines	FL 3-4	450	8. Physical Demands	FL 8-2	20
4. Complexity	FL 4-4	225	9. Work Environment	FL 9-2	20
5. Scope and Effect	FL 5-4	225	TOTAL POINTS		2820
GRADE					GS 12

CLASSIFICATION CERTIFICATION

I certify that this position has been classified as required by Title 5, US Code, in conformance with standards published by the OPM or, if no published standard applies directly, consistently with the most applicable published standards.

29. SIGNATURE  30. DATE **06/23/2008**

31. NAME AND TITLE **Darlene Locke, Human Resources Specialist, Employment and Classification Team, Washington, D.C.**

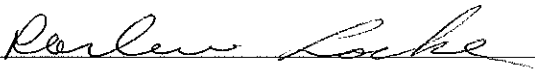
32. REMARKS: Minor modifications made position description dated 6/04/08 33. OPM CERTIFICATION NUMBER

References:OPM JFS PROFESSIONAL WORK, NATURAL RESOURCES MGT & BIOLOGICAL SCIENCES, SEPT 05
Position is FLSA - Exempt.

MASTER RECORD/INDIVIDUAL POSITION DATA
THIS SIDE TO BE COMPLETED BY THE CLASSIFIER

A. KEY DATA					
1. FUNCTION (1)	2. DEPT CD. /AGCY-BUR-CD. (4)	3. SON (4)	4. MR. NO. (6)	5. GRADE (2)	6. IP NO. (8)
	AG 16				

B. MASTER RECORD					
1. PAY PLAN (2)	2. OCC. SERIES (4)	3. OCC. FUNC. CD. (2)	4. OFF. TITLE CD. (5)	5. OFFICIAL TITLE (38)	
GS					
6. HQ. FLD. CD. (1)	7. SUP. CD. (1)	8. CLASS STD. CD. (1)		9. INTERDIS. CD. (1)	10. DT CLASS (6)
1 = HQ 2 = FLD	1 = Sup. SGEG 3 = Mgr. SGEG 4 = Sup. CSRA	5 = Mgmt. CSRA 6 = Leader LGEG 8 = All Others		X = New Standard Applied Blank = NA	N = No Y = Interdis
					MO DAY YEAR
11. EARLY RET. CD. (1)	12. INACT/ACT (1)	13. DT. ABOL. (6)	14. DT. INACT/REACT (6)	15. AGENCY USE (10)	
1 = Primary 2 = Secondary	3 = Foreign Svc. Blank = NA	I = Inactive A = Active			
		MO DAY YEAR	MO DAY YEAR		
16. INTERDISCIPLINARY SERIES (40) (4) Per Block					
17. INTERDISCIPLINARY TITLE CODE (50) (6) Per Block					

C. INDIVIDUAL POSITION					
1. FLSA CD. (1)	2. FIN. DIS. REQ. (1)	3. POS. SCHED. (1)	4. POS. SENS. (1)	5. COMP. LEV. (4)	
E = Exempt N = Nonexempt	0 = None 1 = CD 219 2 = CD 220	3 = SF 278 4 = AD 392 5 = SF 849	A = Sched A B = Sched B C = Sched C	0 = Excepted but not A,B,C	0 = Nonsensitive 1 = Noncritical 2 = Critical Sense
6. WK. TITLE CODE (4)					
7. WK. TITLE (38)					
8. ORG. STR. CODE (18)					
1st	2nd	3rd	4th	5th	6th
9. VAC REV CODE (1)					
0 = Position Action No Vacancy A = No Change					
B = Lower Grade C = Higher Grade					
D = Different title and/or series E = New Position/New FTE					
10. TARGET GD.	11. LANG. REQ. (2)	12. PROJ. DTY. IND. (1)	13. DUTY STATION (9)	14. BUS. CD. (4)	15. DT. LST. AUDIT (6)
		Blank = NA Y = Yes	State (2) City (4) County (3)		MO DAY YEAR
16. PAS. IND. (1)					
Blank=NA 1 = PAS					
17. DATE EST.					
MO DAY YEAR					
18. GD. BASIS. IND (1)					
1 = Rev. when vacant 2 = Impact of Person 3 = Sup./SGEG					
4 = Sup./Program 5 = RGEG 6 = Policy Analysis G E G					
7 = Equipment Devel. Guide 8 = Agency Use 9 = Agency Use ALPHAS = Agency Use					
19. DT.REQ. REC. (6)					
MO DAY YEAR					
20. NTE. DT. (6)					
MO DAY YEAR					
21. POS.ST. BUD (1)					
Y = Perm N = Other					
22. MAIN. REV./CLASS.ACT. CD. (2) (1st Digit = Activity and 2nd Digit = Results)					
Normal Act		Maintenance Review Act		Results	
1 = Desk Audit	5 = Desk Audit	1 = No Action Req.		5 = Series Change	
2 = Sup. Audit	6 = Sup. Audit	2 = Minor PD Change		6 = Pos. Upgrade	
3 = Paper Rev.	7 = Paper Rev.	3 = New PD Req.		7 = Pos. Downgrade	
4 = PME/Activity Rev.	8 = Panel Rev.	4 = Title Change		8 = New Pos.	
9 = Other					
23. DATE EMP. ASGN. (6)	24. DATE ABOL. (6)	25. INACT/ACT(1)	26. DATE INACT/REACT (6)	27. ACCTG. STAT. (4)	28. INT. ASGN. SER. (4)
MO DAY YEAR	MO DAY YEAR	I = Inact. A = Act.	MO DAY YEAR		
30. CLASSIFIER'S SIGNATURE					31. DATE
					06/23/2008
32. REMARKS					

STANDARD POSITION DESCRIPTION

Official Title: Soil Scientist
Working Title: MLRA Soil Survey Leader
Classification: GS-470-12
Number: NHQSCSURL12

Date: June 4, 2008
Date Modified: June 23, 2008
Classified By: NHQ-HRMD-ECT
Location: MLRA Office

Note: This is a standard position description and can not be modified without the approval from the Human Resources Management Division, Employment & Classification Team, NRCS, in Washington D.C.

INTRODUCTION

a. This position is that of a Major Land Resource Area (MLRA) Soil Survey Leader located at the assigned MLRA Soil Survey Office. The incumbent serves as MLRA Soil Survey Leader for all or assigned portions of MLRA's. The leadership includes coordination, quality control, technical guidance and staff assistance for all phases of initial mapping, updating, maintaining and the producing of soil surveys within the framework of the National Cooperative Soil Survey (NCSS) Program and the Natural Resources Conservation Service (NRCS) objective of a seamless digital soil survey of the nation. The incumbent is supervised by the Region MLRA Team Leader/State Soil Scientist located in the assigned state.

b. Performs duties in a manner supportive of a safe and healthy working environment, and exercises safety precautions when exposed to dangerous objects, chemicals, extreme temperatures and weather, etc. Supports and participates in the broad spectrum of safety and health program activities. Comply with safety requirements as outlined in national and state policy including contacting the appropriate utility locator service before digging or excavating soil.

MAJOR DUTIES

1. Administrative and Technical Leadership (40%)

a. Provides leadership, direction, and technical guidance to staff within the assigned MLRA Soil Survey Area. Coordinates all survey activities to insure that the objectives and goals of the entire MLRA Soil Survey and the NRCS objective of a consistent seamless digital soil survey of the nation are achieved. All work performed meets NCSS standards, policies, and procedures and specifications.

b. Prepares soil survey workload analysis, evaluations, MLRA Soil Survey Area Long Range Plans, Area Plans, and Annual Plan of Operations for the MLRA Soil Survey Area Works with the MLRA Technical Team, including State Soil Scientists and other agency staff and cooperators, and the guidelines and goals in the Soil Survey Region Memorandum of Understanding (MOU) to determine soil survey information needs and priorities.

- c. Controls the technical quality of all phases of soil survey area work including collection, description, classification, correlation, investigation, and interpretation of all soil data within the MLRA Soil Survey Area prior to submitting to Regional MLRA Office staff for quality assurance review and final approval. Keeps records of all quality control activities and decisions made during the course of the soil survey area.
- d. Responsible for quality control of the soil survey and performs periodic technical inspections typically across multi-county/state soil landscapes and geomorphic surfaces to ensure that objectives identified in the MOU and work plan are being met.
- e. Works within the broader MLRA Soil Survey Area and Soil Survey Region concept to develop and implement ways to improve the efficiency, productivity and quality of the Soil Survey and products and/or services provided to internal and external customers. Proactively works with staff to eliminate barriers, and implement new technologies, processes and procedures to accelerate the development of new surveys and the maintenance of existing surveys, and ensures that the quality of the work performed by area members meets NCSS standards.
- f. Develops and conducts training of soil survey members and ensures that all soil scientists within the MLRA soil survey area are adequately trained in the use of new technologies, software applications, principles and application of soil survey, development of soil mapping units and legends, techniques of field mapping, updating existing surveys, documentation of soil mapping and map unit concepts.
- g. Serves on regional and national committees, interdisciplinary teams and boards related to making and using soil surveys.
- h. Complies with safety requirements as outlined in national and state policy. May require the safe operation of a 2-wheel or 4-wheel drive, operation of a giddings, bull probe, ATV, snowmobile or backhoe may be required.
- i. Occasionally provides technical soil services by providing training and guidance to NRCS personnel and others in the proper use of soil survey products and information including maps, descriptions and interpretations. This includes use of SSURGO data and Soil Data Viewer. Occasionally performs on-site investigations and provides interpretive data upon request in support of other NRCS programs.

2. Soil Survey Initial Mapping, Maintenance, and Updating (Legend Development and Data Collection) (30%)

- a. Develops soil landscape predictive models and uses soil-landscape relationships to develop and evaluate map units and mapping legends and systematically map and describe the way soils occur in the landscape. Examines existing soils geospatial information using geospatial technologies to identify areas where soil map units and landscapes are not correctly associated. Examines soil property and performance information to identify and correct errors and gaps in

data. Tests and validates data for the survey area and updates computer databases of the National Soil Information System.

b. Provides MLRA Soil Survey Area-wide leadership in evaluation and analysis of technical needs, gaps, or deficiencies in existing soil survey data bases or reports, and in developing and implementing technical plans for initial, maintenance and update of survey area.

c. Provides MLRA Soil Survey Area-wide leadership for performance of all soil survey activities and documentation according to standards in Soil Taxonomy, National Soil Survey Handbook, Soil Survey Manual, and Field Book for Describing and Sampling Soils. Includes collection of soil samples according to the Soil Survey Laboratory Methods Manual for analysis at the National Soil Survey Laboratory and performs appropriate field tests to aid in classification, mapping, and interpretation of the soils in the survey area, with emphasis on benchmark soil landscape concepts.

d. Provides leadership and coordination of activities in planning and conducting special soil studies, special investigations, and data gathering necessary for the development and refinement of soil survey interpretations. Insures that staff obtains landowner/operator permission prior to conducting fieldwork on private property.

e. Prepares and provides preliminary approval for revised and new soil series, which are submitted MO for final approval.

f. Conducts field visits and reviews and provides preliminary approval to all soil survey map unit design, legend development/maintenance, database development/maintenance, interpretations development/maintenance/testing, and soil investigations.

g. Ensures coordination with other technical disciplines (i.e., Soil Conservationists, Foresters, Agronomists) to collect soil performance data to support soil interpretations and to develop and correlate Ecological Sites. Integrates soil surveys with other phases of natural resources conservation programs.

h. Within the framework of the MLRA Soil Survey Area and Soil Survey Region, studies the characteristics of soils, geology, topography, and landforms over the survey area in order to ensure consistency of map units. Evaluates map units of survey area in order to plan the most feasible method of updating map units to current standards and to achieve the NCSS objective of a seamless digital soil survey of the nation.

i. Provides leadership in the utilization of available Geographic Information System and Global Positioning Systems for completion of soil mapping, and ensures that site data are located using GPS and that GIS is utilized for landscape modeling and quality review of mapping.

3. Soil Survey Database and Publication (20%)

a. Provides leadership in the development and management of the National Soils Information System (NASIS) and of soil survey manuscript according to NCSS standards and the MOU for

the MLRA Soil Survey area. Ensures that soil survey documentation, including pedon descriptions and transect/traverse data are captured in NASIS. Utilizes NASIS reports to evaluate and review the accuracy of NASIS entries. Generates map unit descriptions, taxonomic unit descriptions, and interpretive tables for the soil survey manuscript from NASIS data.

b. Coordinates and communicates technical functions of soil survey activities with the MO, NCSS Cooperators, appropriate state office staffs, and other MLRA soil survey offices to assure all products of the soil surveys meet customer needs.

c. Analyzes data to develop and validate ranges in soil characteristics and properties and uses these results to populate NASIS.

d. Write technical and nontechnical materials that relate to the soils and the soil survey and leads the development of soil survey information and reports for assigned area. Publishes soil data and soil information using the Web Soil Survey or other approved methods.

e. Ensures completion of soil survey map compilation or digitizing that meets SSURGO standards. And documentation of join to all adjacent soil survey areas.

4. Supervision (10%)

a. Supervises and trains assigned staff. With participation by employee, develops their performance measures. Evaluates employee performance, recommends appropriate performance awards, inventories training needs, develops appropriate training plans, and makes recommendations for personnel actions. Works with appropriate Line Officers and Human Resources to effect minor disciplinary measures, such as warnings and reprimands, and makes recommendations on more serious matters. Working with each employee, jointly inventories training needs and develops appropriate training plans.

b. Provide leadership in managing and prioritizing the activities of the soil survey staff. Provide leadership in determining workload of the staff by conducting workload analysis, developing and implementing work plans, and other management tools as needed to ensure effective soil survey operations.

5. Civil Rights and Equal Opportunity Employment

a. Provides leadership and guidance in the design, development, and maintenance of administrative procedures to ensure that delivery of NRCS programs and services are carried out without regard to race, color, national origin, religion, sex, age, marital status, or handicap. Reviews the implementation of civil rights policies to determine that they are translated into appropriate actions consistent with annual plans of operation in all units under employee's supervision as well as by recipients.

b. Consistently demonstrates fairness, cooperation, and respect toward co-workers, supervisors, and all internal and external customers. Written and oral communications and interpersonal relations contribute to a productive and nondiscriminatory work environment.

c. Provides leadership and guidance in the design, development, and maintenance of administrative procedures to ensure that delivery of NRCS programs and services are carried out without regard to race, color, national origin, religion, sex, age, marital status, or handicap. Reviews the implementation of civil rights policies to determine that they are translated into appropriate actions consistent with annual plans of operation in all units under employee's supervision as well as by recipients.

Performs other duties as assigned.

Competitive Level – (Designated by state)

CONDITION OF EMPLOYMENT – Must possess and maintain a valid state motor vehicle operator's license for the type of vehicle(s) operated to perform the duties of this position. This will require the operation of a motor vehicle on both public and private roads during daylight hours and occasionally after dark.

EVALUATION FACTORS

1. KNOWLEDGE REQUIRED BY THE POSITION - LEVEL 1-7 (1250 POINTS)

- a. Knowledge and skill in providing leadership and supervision and to manage resources to carry out assigned technical and administrative activities.
- b. Comprehensive knowledge of National Cooperative Soil Survey (NCSS) guidelines, policies, procedures, and standards including soil classification, soil correlation, soil mapping, soil investigations, and soil interpretation development in order to complete soil surveys.
- c. Knowledge and skill in a wide range of methods and technical aspects about the soil survey program including: 1) field investigations utilizing knowledge of soil genesis and geomorphology, soil classification and correlation, photo interpretation, soil-landscape relationships, 2) writing soil descriptions, collecting and summarizing field data, and other information significant to documentation for correlation and interpretive purposes, 3) using and maintaining NASIS database and other software programs to develop and validate data & interpretations and generate mapping unit and taxonomic unit descriptions, 4) recognizing and documenting soil-plant and other ecological relationships, and 5) coordinating activities with partners and other agency specialists in disciplines such as geology, range science, biology, etc.
- d. Skill in defining, scoping and managing soil survey area in order to manage time, workloads, and budgets, make decisions, set priorities, and motivate and lead professional staff in order to meet deadlines, deliver products and services, and otherwise carry out MLRA soil survey area.
- e. Skill in oral and written communication techniques in order to supervise and lead staff, to provide training and technical guidance to staff and other users of soil survey data, to clearly and concisely present critical information on complex issues, and to prepare reports, publications and articles for NRCS employees and managers, tribal leaders, members of the public, special interest groups, program managers, customers, and state and local public officials.

2. SUPERVISORY CONTROLS - LEVEL 2-4 (450 POINTS)

The incumbent works under the supervision of the designated MLRA Soil Survey Regional Office who also provides technical appraisal and guidance. The employee independently plans and carries out assignments referring unusual technical or management problems to the MO Leader. The incumbent frequently works without direct supervision for long periods of time. The MLRA Region Office (MO) provides periodic quality assurance review to ensure that completed work meets standards set forth in NCSS policy and standards.

3. GUIDELINES - LEVEL 3-4 (450 POINTS)

a. Guidelines and Standards of this position are general regarding Agency policy and objectives. The guidelines of this position include state strategic plans, MO and state business plans, and the MLRA Soil Survey Area plan of operations, the Soil Survey Memorandum of Understanding (MOU), Soil Taxonomy, Soil Survey Manual, computer manuals, National Soil Survey Handbook, Field Book for Describing and Sampling Soils, Soil Survey Laboratory Methods Manual, MO guides, state office guides, and national and state bulletins and instructions which outline policies, procedures, and technical standards.

b. Independent judgment is used in interpreting the guidelines based on precedents. When guidelines are not applicable and alternatives are unclear, the employee will seek advice from State Soil Scientists and the MO Leader. These sources should also be sought when unusually difficult situations, which require a great deal of adaptation of standard procedures or departure from policy, are encountered.

4. COMPLEXITY- LEVEL 4-4 (225 POINTS)

a. The incumbent has leadership and quality control responsibility for all phases of soil survey area work with the MLRA Soil Survey area. The assigned work area is usually one of diverse topographic conditions with soils in complex patterns. The incumbent must apply and adapt established guidelines and procedures to the survey operations, and use judgment based on experience and past applications when adapting to situations in the MLRA Soil Survey area. Complex land ownership can make access permissions difficult to attain. The incumbent may supervise one or more GS 5-7-9-11 staff positions.

b. Work consists of a variety of duties that involve many different and unrelated process and methods pertinent to soil survey area management and operations in the field. The incumbent will decide what needs to be done by conducting special studies, evaluating unusual circumstances, consider different approaches, consider incomplete and conflicting data and consider environmental problems with conflicting requirements when solutions may have serious implications for industry, commercial concerns, or the general public.

5. SCOPE AND EFFECT - LEVEL 5-4 (225 POINTS)

- a. The work involves leading an effort to map, maintain, or update soil survey data within the MLRA Soil Survey area. The employee controls the conduct of all phases of soil survey area work, including mapping, classification, investigations, interpretations, manuscripts, and map compilation. Separate teams, under the overall leadership of the incumbent, may work be working simultaneously within multiple projects within the MLRA Soil Survey area.
- b. The work affects the quality of the soil survey data available for use by the general public, local and State governments, Federal agencies, consultants, and landowners. The incumbent's work affects the creditability of the agency.

6 & 7 PERSONAL & PURPOSE OF CONTACTS - LEVEL 3-C (180 POINTS)

- a. Personal Contacts - Contacts are with landowners and operators, NRCS personnel, Federal, State, and local government representatives, other agencies, and the public using or cooperating in the soil survey. Contacts are made in person, by email, and over the telephone.
- b. Purpose of Contacts - The purpose of these contacts is to exchange and/or present information, coordinate soil survey activities, to render technical assistance, or to obtain permission to map or sample soils in the survey area. The incumbent frequently represents the agency and must be sensitive to public relations.

8. PHYSICAL DEMANDS - LEVEL 8-2 (20 POINTS)

Some work is sedentary and performed while seated. Some work requires physical exertion such crouching, bending, lifting equipment and soil samples (up to 70 pounds), hand digging of soil pits, walking over wet, rough, uneven or rocky surfaces, and driving over rough terrain. The job requires traversing all types of terrain on foot, crossing drains and fences, and the operation of hand and power tools to examine soils in place and to obtain soil samples for laboratory analyses. Substantial physical effort is required. The incumbent may be required to travel to outlying areas to perform work, sometimes under adverse weather conditions. The work requires average agility and dexterity. To perform the duties of this position, the incumbent must serve as an incidental motor vehicle operator.

9. WORK ENVIRONMENT - LEVEL 9-2 (20 POINTS)

Some work is performed in the office setting where normal safety precautions are exercised. However, the fieldwork involves exposure to moderate risks and discomforts such as: high levels of dust; high winds and low or high temperatures, poisonous insects, plants, and adverse weather conditions; regular and recurring exposure to operating equipment such as 4x4 vehicles and ATVs. Field work is typically performed alone and often in remote locations. There is a

potential for confrontation with wild and domestic animals such as cattle, dogs, bears, etc. Employee is required to wear proper personal protective equipment when operating backhoe, traveling in ATV vehicles, and to insure that other employees follow these requirements as well.

Total Points = 2820

Point Range 2755-3150 = GS-12

This position is determined to be exempt from the provisions in the FLSA as defined in 5CFR 551.

Note: Minor modifications made to change the term soil survey project to soil survey area. The grades and series did not change. DL 06/23/08